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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,265	12/03/2001	Masatsugu Maeda	14875-096001/C2-105DP1P	5055
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FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER WEHBE, ANNE MARIE SABRINA	
			ART UNIT	PAPER NUMBER
			1633	
			MAIL DATE	DELIVERY MODE
			10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/006,265

Applicant(s)

MAEDA ET AL.

Examiner

Anne Marie S. Wehbe

Art Unit

1633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 11, 12 and 28-48 is/are pending in the application.
- 4a) Of the above claim(s) 11, 12 and 28-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 32, 36-45, 47 and 48 is/are allowed.
- 6) ☒ Claim(s) 33-35, 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/24/07 has been entered. Applicant's amendment and response submitted with the RCE have also been entered. Claims 2-10 and 13-27 are canceled and new claims 32-48 have been added. Claims 1, 11-12, and 28-48 are now pending in the instant application. Claims 11-12 and 28-31 remain withdrawn from consideration as being drawn to an invention non-elected without traverse in the paper filed on 1/10/05. Claims 1 and 32-48 are currently under examination. An action on the merits follows.

Those sections of Title 35, US code, not included in this action can be found in previous office actions.

Claim Rejections - 35 USC § 102

The rejection of previously pending claims 2, 4, 6, and 8 under 35 U.S.C. 102(e) as being anticipated by 6,747,137 (2004), hereafter referred to as Weinstock et al., is maintained over new claims 33-34, and 46. Applicant's arguments have been fully considered but have not been found persuasive in overcoming the rejection for reasons of record as discussed in detail below.

Art Unit: 1633

The claims are drawn to an isolated nucleic acid comprising a nucleotide sequence encoding a fragment of an amino acid sequence of SEQ ID NO:2, 4, or 17, wherein the fragment is at least 7 amino acids in length, or more than 8 amino acid residues in length, or an isolated nucleic acid consisting of a nucleotide sequence encoding a fragment of an amino acid sequence of SEQ ID NO:2, 4, or 17, wherein the fragment is at least 7 amino acids in length.

As set forth in previous office actions, Weinstock et al teaches an isolated nucleic acid sequence comprising a fragment with 100% sequence identity to a 9 amino acid fragment present in each of SEQ ID NOS: 2, 4, and 17 (Weinstock et al., SEQ ID NO: 3111). It is further noted in regards to new claim 46, which recites that the nucleic acid consists of the fragment at least 7 amino acids residues in length, that Weinstock et al, further specifically teaches nucleic acid probes or isolated nucleic acids of at least about 20 consecutive nucleotides of a sequence selected from a group which includes SEQ ID NO:3111 (Weinstock et al., columns 7-8). Note that “at least about 20 nucleotides” clearly encompasses 21mers such as the specific 21mer nucleotide sequence that encodes at least 7 of the amino acids of the 9 amino acid fragment with 100% sequence identity to each of SEQ ID NOS: 2, 4, and 17. Thus, by teaching all the limitations of the claims as written, Weinstock et al. anticipates the instant invention as claimed.

The applicant argues that since the sequence that encodes the amino acid fragment with 100% sequence identity is from the antisense strand, that Weinstock et al. does not specifically disclose the sequence of the antisense strand or any amino acids encoded by this strand. This is not agreed as Weinstock et al. in column 8 clearly teaches that the isolated nucleic acids “..comprise sequences contained within any ORF (open reading frame), including a complete protein-coding sequence, of which any of SEQ ID NO: 1-SEQ ID NO: 14103 forms a

Art Unit: 1633

part" (column 8, lines 13-16). Further, note that DNA is inherently double stranded such that possession of the sequence of one strand constitutes possession of the complementary strand. Weinstock et al. also clearly teaches that the invention encompasses nucleic acids which encode amino acid sequences from any open reading frame, not limited to the sense strand. Thus, applicant's arguments are not found persuasive and the rejection of record is maintained.

Applicant's submission of new claim 35 has necessitated the following new grounds of rejection.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 35 is newly rejected under 35 U.S.C. 102(a) as being anticipated by Genbank Accession Number AQ022781.1, submitted to Genbank and therefore publicly available on June 16, 1998. The applicant claims an isolated nucleic acid comprising a nucleotide sequence encoding a fragment of an amino acid sequence of SEQ ID NO:2, 4, or 17, wherein the fragment is more than 9 amino acids in length.

Genbank Accession Number AQ022781.1 is an isolated linear DNA derived from a human genomic sperm library which comprises a nucleotide sequence encoding an amino acid sequence comprising a 31 amino acid fragment with 100 % sequence identity to SEQ ID NO:2 as

Art Unit: 1633

shown in the sequence alignment. Thus, by teaching all the limitations of the claim as written, Genbank Accession Number AQ022781.1 anticipates the instant invention as claimed.

Allowable Subject Matter

Claims 1, 32, 36-45, and 47-48 are considered free of the prior art and allowable at this time.

Any inquiry concerning this communication from the examiner should be directed to Anne Marie S. Wehbé, Ph.D., whose telephone number is (571) 272-0737. If the examiner is not available, the examiner's supervisor, Joseph Woitach, can be reached at (571) 272-0739. For all official communications, **the new technology center fax number is (571) 273-8300**. Please note that all official communications and responses sent by fax must be directed to the technology center fax number. For informal, non-official communications only, the examiner's direct fax number is (571) 273-0737. For any inquiry of a general nature, please call (571) 272-0547.

The applicant can also consult the USPTO's Patent Application Information Retrieval system (PAIR) on the internet for patent application status and history information, and for electronic images of applications. For questions or problems related to PAIR, please call the

° USPTO Patent Electronic Business Center (Patent EBC) toll free at 1-866-217-9197.

Representatives are available daily from 6am to midnight (EST). When calling please have your

Application/Control Number: 10/006,265

Page 6

Art Unit: 1633

application serial number or patent number available. For all other customer support, please call the USPTO call center (UCC) at 1-800-786-9199.

Dr. A.M.S. Wehbé

/Anne Marie S. Wehbé/
Primary Examiner, A.U. 1633